



## REISSUE APPLICATION DECLARATION BY THE INVENTOR

Docket Number (Optional)

2751.2000

I hereby declare that:

Each inventor's residence, mailing address and citizenship are stated below next to their name.

I believe the inventors named below to be the original and first inventor(s) of the subject matter which is described and claimed in patent number 6,258,988 B1, granted July 10, 2001 and for which a reissue patent is sought on the invention entitled Method for Reforming Organics into Shorter Chain Unsaturated Organic Compounds, the specification of which

☐ is attached hereto.

☒ was filed on July 10, 2003 as reissue application number 10/616,797 and was amended on July 10, 2003.  
(If applicable)

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

☐ I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b). Attached is form PTO/SB/2B (or equivalent) listing the foreign applications.

I verily believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below. (Check all boxes that apply.)

☐ by reason of a defective specification or drawing.

☒ by reason of the patentee claiming more or less than he had the right to claim in the patent.

☐ by reason of other errors.

At least one error upon which reissue is based is described below. If the reissue is a broadening reissue, such must be stated with an explanation as to the nature of the broadening:

Patentee was entitled to claim apparatuses useful in the patented methods. Thus, patentee claimed less than he had the right to claim. As such, this broadening reissue claims such apparatuses.

[Page 1 of 2]

This collection of information is required by 37 CFR 1.175. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

(REISSUE APPLICATION DECLARATION BY THE INVENTOR, page 2)

Docket Number (Optional)  
2751.3000

All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant. As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith.

Name(s)	Registration Number
Carolyn S. Elmore	37,567
Anne I. Craig	32,976

Correspondence Address: Direct all communications about the application to:

☐ Customer Number:

OR

<input checked="" type="checkbox"/> Firm or Individual Name	Elmore Craig, P.C.				
Address	209 Main Street				
Address					
City	Chelmsford	State	MA	Zip	01863
Country	USA				
Telephone	(978) 251-3509	Fax	(978) 251-3973		

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed.

Full name of sole or first inventor (given name, family name)

Christopher J. Nagel

Inventor's signature



Date

May 10, 2004

Residence

28 Highland Circle, Wayland, MA 01778

Citizenship

United States

Mailing Address

Full name of second joint inventor (given name, family name)

Thomas P. Griffin

Inventor's signature

Date

Residence

Citizenship

Mailing Address

Full name of third joint inventor (given name, family name)

Thomas A. Kinney

Inventor's signature

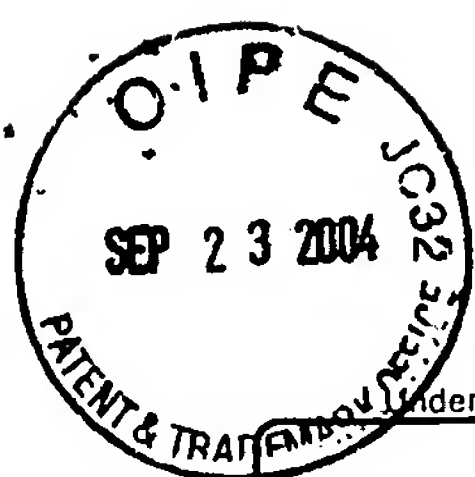
Date

Residence

Citizenship

Mailing Address

☒ Additional joint inventors or legal representative(s) are named on separately numbered sheets forms PTO/SB/02A or 02LR attached hereto.

**DECLARATION****ADDITIONAL INVENTOR(S)**

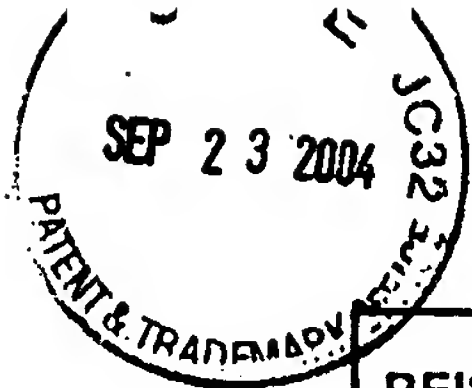
Supplemental Sheet

Page 4 of 4

<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Kevin A.		Sparks	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	Zip	Country
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	Zip	Country
<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
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## REISSUE APPLICATION DECLARATION BY THE INVENTOR

Docket Number (Optional)

2751.2000

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I believe the inventors named below to be the original and first inventor(s) of the subject matter which is described and claimed in patent number 6,258,988 B1 granted July 10, 2001 and for which a reissue patent is sought on the invention entitled Method for Reforming Organics into Shorter Chain Unsaturated Organic Compounds

the specification of which

☐ is attached hereto.☒ was filed on July 10, 2003 as reissue application number 10/616,797and was amended on July 10, 2003  
(If applicable)

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☐ I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b). Attached is form PTO/SB/2B (or equivalent) listing the foreign applications.

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[Page 1 of 2]

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

(REISSUE APPLICATION DECLARATION BY THE INVENTOR, page 2)				Docket Number (Optional) 2751.3000	
All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant. As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith.					
Name(s)		Registration Number			
Carolyn S. Elmore		37,567			
Anne I. Craig		32,976			
Correspondence Address: Direct all communications about the application to:					
<input type="checkbox"/> Customer Number:					
OR					
<input checked="" type="checkbox"/> Firm or Individual Name		Elmore Craig, P.C.			
Address		209 Main Street			
Address					
City		Chelmsford	State	MA	Zip 01863
Country		USA			
Telephone		(978) 251-3509	Fax	(978) 251-3973	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed.					
Full name of sole or first inventor (given name, family name) Christopher J. Nagel					
Inventor's signature			Date		
Residence			Citizenship		
Mailing Address					
Full name of second joint inventor (given name, family name) Thomas P. Griffin					
Inventor's signature <i>Thomas P. Griffin</i>			Date 7-31-04		
Residence Kennett Township, PA (US)			Citizenship United States of America		
Mailing Address 10 Normandy Drive, Kennett Township, PA 19317					
Full name of third joint inventor (given name, family name) Thomas A. Kinney					
Inventor's signature			Date		
Residence			Citizenship		
Mailing Address					
<input checked="" type="checkbox"/> Additional joint inventors or legal representative(s) are named on separately numbered sheets forms PTO/SB/02A or 02LR attached hereto.					

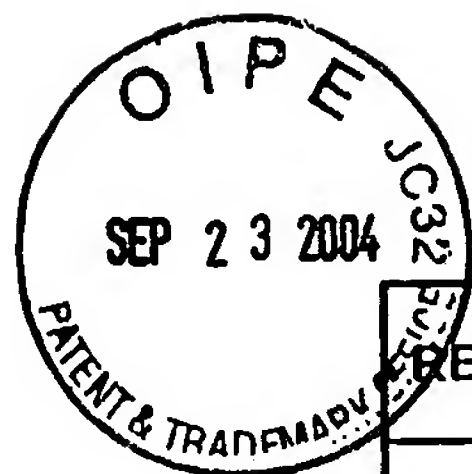
**DECLARATION****ADDITIONAL INVENTOR(S)**  
Supplemental SheetPage **1** of **1**

<b>Name of Additional Joint Inventor, if any:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Kevin A.		Sparks	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
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☒ Firm or  
Individual Name

Elmore Craig, P.C.

Address

209 Main Street

Address

City

Chelmsford

State

MA

Zip

01863

Country

USA

Telephone

(978) 251-3509

Fax

(978) 251-3973

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Full name of sole or first inventor (given name, family name)

Christopher J. Nagel

Inventor's signature

Date

Residence

Citizenship

Mailing Address

Full name of second joint inventor (given name, family name)

Thomas P. Griffin

Inventor's signature

Date

Residence

Citizenship

Mailing Address

Full name of third joint inventor (given name, family name)

Thomas A. Kinney

Inventor's signature

Date

Residence

Citizenship

Mailing Address



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## DECLARATION

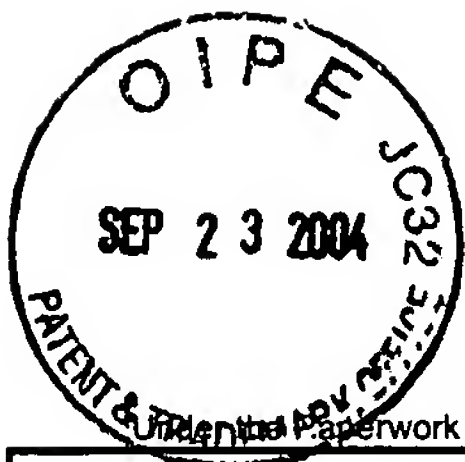
ADDITIONAL INVENTOR(S)  
Supplemental Sheet

Page 1 of 1


Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Kevin A.		Sparks	
Inventor's Signature <i>[Signature]</i>		Date 6-7-04	
Residence: City	Scituate	State	MA
		Country	USA
Citizenship			
Mailing Address			
Mailing Address 66 Gannett Rd.			
City	Scituate,	State	MA
		Zip	02066
		Country	USA
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature			
Residence: City		State	
		Country	
Citizenship			
Mailing Address			
Mailing Address			
City		State	
		Zip	
		Country	
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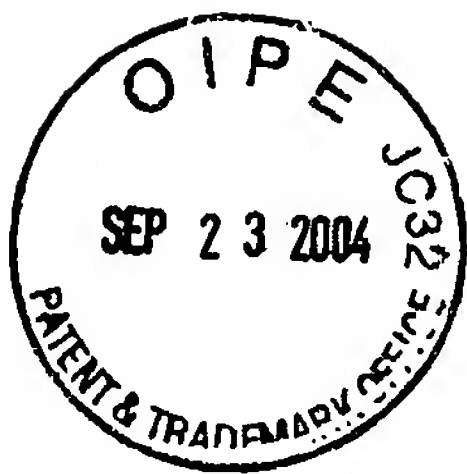


PTO/SB/53 (05-03)  
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
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<b>REISSUE APPLICATION: CONSENT OF ASSIGNEE; STATEMENT OF NON-ASSIGNMENT</b>		<b>Docket Number (Optional)</b> 2751.2000 US (formerly 2751 3000)
This is part of the application for a reissue patent based on the original patent identified below.		
Name of Patentee(s) Christopher J. Nagel, Thomas P. Griffin, Thomas A. Kinney, and Kevin A. Sparks		
Patent Number 6,258,988 B1	Date Patent Issued July 10, 2001	
Title of Invention Method for Reforming Organics into Shorter-Chain Unsaturated Organic Compounds		
<p>1. <input checked="" type="checkbox"/> Filed herein is a statement under 37 CFR 3.73(b). (Form PTO/SB/96)</p> <p>2. <input type="checkbox"/> Ownership of the patent is in the inventor(s), and no assignment of the patent is in effect.</p> <p>One of boxes 1 or 2 above must be checked. If multiple assignees, complete this form for each assignee. If box 2 is checked, skip the next entry and go directly to "Name of Assignee".</p> <p>The written consent of all assignees and inventors owning an undivided interest in the original patent is included in this application for reissue.</p>		
The assignee(s) owning an undivided interest in said original patent is/are <u>100%</u> , and the assignee(s) consents to the accompanying application for reissue.		
Name of assignee/inventor (if not assigned)		
Signature 	Date May 10, 2004	
Typed or printed name and title of person signing for assignee (if assigned) Christopher J. Nagel VP, Product Development and Founding Scientist		

This collection of information is required by 37 CFR 1.172. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Docket No. 2751.2000 US

STATEMENT UNDER 37 C.F.R. ' 3.73(b)

Applicants: Christopher J. Nagel, Thomas P. Griffin, Thomas A. Kinney, and Kevin A. Sparks

Application No.: 10/616,797 Filed: July 10, 2003

Quantum Catalytics, LL.C., a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is

- A. ☒ the assignee of the entire right, title and interest in the patent application identified above; or
- B. ☐ an assignee together with ☐ of the entire right, title and interest in the patent application identified above.

The right, title and interest of the above-named assignee in the patent application identified above is established by virtue of:

- A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel 6894, Frame 0296-0300, or a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Date: May 10, 2004

Name: Christopher J. Nagel

Title: VP, Product Development and Founding Scientist

Signature: 